# BEFORE THE POSTAL RATE COMMISSION WASHINGTON D.C. 20268-0001

ALING LOIN, D.C.	20208-0001	
·		RECEIVE

Postal Rate and Fee Changes, 1997

Docket No. TRI RATE COMMISSION OF THE SECRETAR

#### NEWSPAPER ASSOCIATION OF AMERICA INTERROGATORIES TO UNITED STATES POSTAL SERVICE WITNESS MICHAEL D. BRADLEY

(NAA/ USPS-T14-1-15)

July 30, 1997

The Newspaper Association of America hereby submits the attached interrogatories to United States Postal Service witness Michael D. Bradley (USPS-T-14) and respectfully requests a timely and full response under oath.

Respectfully submitted,

NEWSPAPER ASSOCIATION OF AMERICA

Robert J. Brinkmann NEWSPAPER ASSOCIATION OF AMERICA 529 14th Street, N.W. Suite 440 Washington, D.C. (202) 638-4792

William B. Baker Michael Yourshaw WILEY, REIN & FIELDING 1776 K Street, N.W. Washington, DC 20006-2304

(202) 429-7255

July 30, 1997

#### CERTIFICATE OF SERVICE

I hereby certify that I have this date served the instant document on all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

July 30, 1997

William B. Baker

- NAA/USPS-T14-1. Please refer to page 14 of your written testimony where you discuss the selection of a time trend variable to represent technological change.
  - a. Please provide all supporting data and analyses that demonstrate that an exponential time trend appropriately reflects technological change in postal service processing operations.
  - b. Please identify all other statistical approaches that you considered before selecting a time trend methodology, and explain why each was rejected.
- NAA/USPS-T14-2. Please refer to pages 16-7 of your written testimony where you discuss your choice of the "manual ratio" as a non-volumetric explanatory variable.
  - a. Please provide the correlation of each manual ratio variable with the total volumes processed on mechanized and automated equipment.
  - b. Please explain why, in your opinion, the coefficient of this manual ratio variable reflects only "non-volume" changes in mail processing labor hours.
- NAA/USPS-T14-3. Please refer to page 47 of your written testimony where you discuss your choice of a generalized seasonality model with 12 dummy variables.
  - a. Please explain fully whether or not the seasonal dummy variables include any volumetric effects.
  - b. Please provide the econometric results shown in Tables 7, 8, 9 and 10 when the seasonal dummy variables are excluded.

NAA/USPS-T14-4. Please refer to Tables 7, 8, 9 and 10 of your written testimony.

- a. Please explain the proper interpretation of the positive signs on the Time Trend 2 coefficients in Tables 7, 8, 9, and 10.
- b. Please provide the correlation between the post-9301 time trend variable and the volume variables used in these equations. Please indicate whether multicollinearity exists between these variables.
- c. Please provide the econometric results shown in Tables 7, 8, 9, and 10 when both time trend variables are excluded.
- d. Please provide the econometric results shown in Tables 7, 8, 9 and 10 when the Time Trend 2 is excluded.
- NAA/USPS-T14-5. Please refer to page 55, lines 6 to 8 of your written testimony. Please explain fully why the second order terms containing volume are not included in the elasticity calculation.
- NAA/USPS-T14-6. At page 55, lines 13-14, you conclude that you "find very little support for the Postal Service's old assumption of proportionality between costs and volume."
  - a. Please confirm that your equations show little support for the assumption of proportionality between labor hours and volume within each sorting activity. If you disagree with this characterization, please explain what specifically what you can conclude from your analysis.
  - b. Please confirm that you have not analyzed the relationship between total mail processing labor costs or labor hours and volume across all processing options. If you cannot confirm, please explain.
- NAA/USPS-T14-7. Please provide any statistical, econometric or other types of analyses or studies performed by either the Postal Service or its contractors that evaluate the

relationship between mail processing costs or labor hours and volume. (For example, are overtime costs higher during periods of high volume?)

NAA/USPS-T14-8. Please provide all analyses and studies performed by the Postal Service that address the issue of whether higher cost processing activities, such as mechanized equipment and manual sortation, are used more than proportionately during periods of higher volume.

NAA/USPS-T14-9. Please provide specific definitions of the terms "elasticity" as used in Tables 7, 8, 9 and 10 and the term "variability" used in Table 13. Please explain the relationship between the two terms.

NAA/USPS-T14-10. Please refer to Table 14 of your written testimony.

- a. Please explain the proper interpretation of the positive sign on the time trend coefficient shown in Table 14 (the two-way panel model).
- b. Please provide the correlation between the volume variable and the time trend variable in these equations and identify whether collinearity between volume and the time trend posed a problem when estimating the coefficients of these variables.
- NAA/USPS-T14-11. Please refer to your written testimony at page 75. You selected year-specific dummy variables for the regression analysis using annual data. Please explain whether or not the annual dummy variables incorporate volumetric effects.

- NAA/USPS-T14-12. Please refer to your written testimony at page 55, lines 17-18 and page 56, lines 1-3. You conclude that "[c]ertain [mail processing] functions, like setting up mail processing equipment or tying down a manual case are done for each sorting activity and are not sensitive to the amount of volume sorted."
  - a. In your opinion, are these costs "fixed" in the short run, long run or both? Please explain your response fully.
  - b. In your opinion, is the amount of mail processing equipment used by the Postal Service related to the expected volume of mail to be processed? Please explain fully.
- NAA/USPS-T14-13. Please refer to your written testimony at page 56, lines 7-10. Please provide all analyses and studies performed by the Postal Service indicating that changes in the volume of mail, rather than technological changes, have improved mail processing productivity.
- NAA/USPS-T14-14. Please refer to your written testimony at page 57, line 22 and page 58, lines 1-4.
  - a. Please specify the range of volume over which your assertion that piece productivity rises as volume rises applies. Please provide all supporting analyses and studies performed by the Postal Service.
  - b. Please evaluate the likely impact of marginal increases in mail volume when mail volume exceeds the range specified in (a) above on marginal piece productivity and labor costs of "gateway" activities.

NAA/USPS-T14-15. Please refer to your written testimony at page 58, lines 15-17: Please provide all analyses and studies performed by the Postal Service indicating that labor hours required for "backstop" activities over the long term are not proportionately related to mail volumes.